

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An LED, comprising:

a first gallium nitride layer;

a first electrode at one portion of and above the first gallium nitride layer;

an active layer above the first gallium nitride layer;

a second gallium nitride layer above the active layer;

a plurality of transparent electrodes ~~above~~on the second gallium nitride layer, wherein one of the plurality of transparent electrodes is electrically connected to, and is physically isolated from, another of the plurality of transparent electrodes;

a second electrode above the second gallium nitride layer; and

a plurality of connection units directly in contact with the second gallium nitride layer, each connection unit electrically ~~and commonly~~ connecting a respective one of the plurality of transparent electrodes with the second electrode.

5

~~wherein the plurality of connection units are formed of a material different from the plurality of transparent electrodes.~~

2-17. (Cancelled)

18. (Currently Amended) An LED, comprising:

a substrate;

a first gallium nitride layer above the substrate;

an active layer above the second gallium nitride layer;

a second gallium nitride layer above the active layer;

a first electrode above the first gallium nitride layer;
a second electrode above the second gallium nitride layer; [[and]]
~~a transparent electrode above the second gallium nitride layer,~~
~~wherein the transparent electrode comprises a plurality of patterns,~~
~~wherein one of the plurality of patterns is physically isolated from another of the plurality~~
~~of patterns; and~~
a plurality of transparent electrodes on the second gallium nitride layer, wherein at least
one of the plurality of transparent electrodes is physically isolated from another of the plurality
of transparent electrodes; and
a plurality of connection units directly in contact with the second gallium nitride layer,
each connection unit electrically connecting a respective one of the plurality of transparent
electrodes with the second electrode,
wherein at least two of the plurality of patterns have striped-shapes.

19. (Cancelled)

20. (Previously Presented) The LED according to claim 18, wherein the plurality of patterns comprise at least three patterns.

21-25. (Cancelled)

26. (Previously Presented) The LED according to claim 1, wherein the plurality of connection units directly connect the second electrode with a respective one of the plurality of transparent electrodes.

27. (Previously Presented) The LED according to claim 1, wherein the plurality of transparent electrodes, the second electrode and the plurality of connection units are formed directly on the second gallium nitride layer.

28. (Previously Presented) The LED according to claim 18, wherein the plurality of patterns are formed directly above the second gallium nitride layer.

29. (Previously Presented) The LED according to claim 1, wherein the plurality of transparent electrodes are co-planar.

30. (Cancelled)

31. (Previously Presented) The LED according to claim 1, wherein the plurality of connection units are formed of metal films.

32. (Previously Presented) The LED according to claim 1, wherein the plurality of transparent electrodes are disposed directly above corresponding physically separated locations of a surface of the second gallium nitride layer.

33. (Previously Presented) The LED according to claim 18, wherein at least two of the plurality of patterns are parallel to each other.

34. (Previously Presented) The LED according to claim 18, wherein the at least two of the plurality of patterns having striped-shapes are perpendicular to an imaginary line between the first electrode and the second electrode.

35. (Currently Amended) An LED, comprising:

an N-type layer including gallium nitride;

a P-type layer including gallium nitride;

an active layer including Indium gallium nitride between the N-type layer and the P-type layer, wherein the active layer includes a quantum well structure; [[and]]

a plurality of transparent electrodes directly ~~above~~ on the P-type layer, wherein one of the plurality of transparent electrodes is physically isolated from another of the plurality of transparent electrodes;

a first electrode on the N-type layer; and

a second electrode on the P-type layer,

wherein at least two of the plurality of transparent electrodes are perpendicular to a line passing through both a center of the first electrode and a center of the second electrode in a plan view.

36. (Cancelled)

37. (Currently Amended) The LED according to ~~claim 36~~ claim 35, wherein at least a portion of the second electrode is directly in contact with the P-type layer.

38. (Currently Amended) The LED according to ~~claim 36~~claim 35, wherein the second electrode and the plurality of transparent electrodes are in contact with the P-type layer.

39. (Previously Presented) The LED according to claim 35, wherein an exposed surface of the P-type layer between the plurality of transparent electrodes has a slit shape.

40. (Previously Presented) The LED according to claim 35, wherein at least two of the plurality of transparent electrodes have striped-shapes.

41. (Previously Presented) The LED according to claim 35, wherein at least two of the plurality of transparent electrodes are parallel to each other.

42. (Cancelled)

43. (Currently Amended) The LED according to ~~claim 36~~claim 35, wherein a side surface of the one of the plurality of transparent electrodes is contacted with a side surface of the second electrode.

44. (Previously Presented) The LED according to claim 35, further comprising:
a metal film disposed between the plurality of transparent electrodes and directly contacted with the P-type layer.